

## TREASURE

## OUR

# california

## COASTS

## and

## ESTUARIES

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HE POPULATION OF CALIFORNIA IS GROWING AT A RATE OF WELL OVER 500,000 PEOPLE ANNUALLY — INCREASING DEVELOPMENT PRESSURES ALONG THE STATE'S SCENIC COASTLINE. FOR CALIFORNIA, RESOURCE MANAGEMENT AND CONSERVATION MEAN MINIMIZING THE IMPACT OF PORT AND RESIDENTIAL DEVELOPMENT, OIL AND GAS DEVELOPMENT AND TRANSPORTATION, AND POLLUTED RUNOFF. SOME OF THE STATE'S MAJOR COASTAL INDUSTRIES INCLUDE TOURISM, PORTS, FISHING, AND AGRICULTURE. THE COASTAL ZONE MANAGEMENT ACT (CZMA) PROVIDES THE FRAMEWORK NECESSARY TO SUSTAIN THE ECONOMIC AND ECOLOGICAL VALUE OF CALIFORNIA'S COASTAL AREAS. THIS LAW, WHICH IS ADMINISTERED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), RECOGNIZES A NATIONAL INTEREST IN OUR COASTAL AND OCEAN AREAS. IT ALLOWS STATES AND TERRITORIES, NOT THE FEDERAL GOVERNMENT, TO DETERMINE HOW BEST TO BALANCE CONSERVATION OF THE COASTAL ENVIRONMENT WITH HUMAN USES THAT DEPEND ON COASTAL RESOURCES.

miles of coastline  
**3,427**

coastal population in 2000  
**24,260,999**

fy03 czma core (section 306)  
funding  
**\$2,000,000**

fy03 czma enhancements  
(section 309) funding  
**\$540,000**

fy03 coastal nonpoint  
implementation  
**\$525,000**

fy03 national estuarine research  
reserve operations, education,  
monitoring and stewardship  
**\$1,105,000**

fy03 national estuarine research  
reserve land acquisition and  
construction  
**\$380,000**

## THE CZMA IN CALIFORNIA

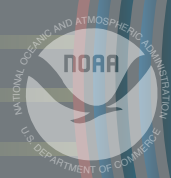
The CZMA establishes two programs to balance the use and protection of America's coasts. The Coastal Management Program gives states a flexible framework to address a broad range of community development, economic, and natural resource issues at the state and local level. The National Estuarine Research Reserve System protects key coastal areas for long-term scientific study, education, and resource stewardship.

### *California Coastal Management Program*

*Approved: 1977*

*Lead Agencies: California Coastal Commission, San Francisco Bay Conservation and Development Commission, State Coastal Conservancy*

The California Coastal Management Program uses a variety of planning, permitting, and non-regulatory mechanisms to manage its coastal resources. Both the California Coastal Commission and the San Francisco Bay Conservation and Development Commission implement well-established permitting and



planning programs, while the Conservancy focuses on restoration, land acquisition, and public access projects. The California Coastal Commission and the San Francisco Bay Conservation and Development Commission rely heavily upon federal consistency review authority to evaluate projects conducted or funded by the federal government, as well as private sector projects that require federal permits.

Accomplishments of the California Coastal Management Program include:

- *To address growing concerns over the disposal of dredged material in San Francisco Bay, the San Francisco Bay Conservation and Development Commission, with other state and federal agencies, developed a plan governing dredging and the disposal of dredged material. To reduce the amount deposited in the bay, most dredged material will either be disposed at a deep ocean site or be reused for beneficial projects. In addition, a Dredge Material Management Office (comprised of the federal and state permitting agencies) was established as a single point of contact for dredging permit applicants and to address the limited capacity for disposal within the bay.*
- *In 2000, California was the third state to receive full approval of its Coastal Nonpoint Pollution Control Program. This effort is a partnership among the California Coastal Commission, the State Water Resource Control Board, and 28 other state agencies. Protecting and restoring coastal water quality includes working with local governments to develop programs, identifying critical coastal areas in need of additional protection, and educating recreational boaters and marina operators on best practices to protect coastal waters.*
- *California Coastal Cleanup Day is the premier volunteer event focused on the marine environment in the country and is sponsored by the California Coastal Commission. Each year, more than 40,000 volunteers turn out to over 400 cleanup sites statewide to conduct what has been hailed by the Guinness Book of Records as “the largest garbage collection” (1993). Since the program started in 1985, over 506,000 Californians have removed more than 7.5 million pounds of debris from the state’s shorelines and coast.*

## ***California's National Estuarine Research Reserves***

The Elkhorn Slough and Tijuana River National Estuarine Research Reserves and the proposed San Francisco Bay National Estuarine Research Reserve are part of a national network of coastal protected areas that conduct science, education, and resource stewardship. The reserve system is a partnership between NOAA and the states.

### ***Elkhorn Slough National Estuarine Research Reserve***

***Designated: 1979***

***Lead Agency: California Department of Fish and Game***

Elkhorn Slough Reserve is one of the relatively few coastal wetlands remaining in California. The reserve provides protection for the diverse life found in the estuary. The channels and tidal creeks of the slough are nurseries for more than 80 species of fish. The slough is on the Pacific Flyway and provides an important feeding and resting ground for many types of migrating waterfowl and shorebirds. The area is renowned for outstanding birding opportunities, and at least six threatened or endangered species utilize the slough or its surrounding uplands. Critical issues addressed by the reserve include sediment and nutrient impacts from farming and erosion of wetlands.

The Visitor Center introduces visitors to the unseen wonders of the Slough and their habitats. Visitors can access five miles of trails of varying lengths through many of the habitats. Education programs include teacher workshops, docent-led public walks, and Coastal Decisionmaker Workshops. Research activities are implemented by senior scientists and all levels of students. Continuous monitoring of weather, water quality, erosion, and organism distribution are conducted by staff, volunteers, and visiting researchers. Habitat enhancement and restoration programs are active and expanding.

## ***Tijuana River National Estuarine Research Reserve***

*Designated: 1982*

*Lead Agency: California Department of Parks and Recreation*

The Tijuana River Reserve is located in a highly urbanized environment. The reserve encompasses beach, dune, mudflat, salt-marsh, riparian, coastal sage, and upland habitats surrounded by the growing cities of Tijuana, Imperial Beach, and San Diego. Three quarters of the watershed for the reserve is in Mexico, requiring an international dimension in the management, education, and research programs of the site. Critical issues confronted by the reserve include habitat restoration, endangered species management, management of wastewater from Mexico, sediment management, and the integration of recreation with habitat conservation and restoration.

For more than 20 years, research and monitoring programs have focused on engineering approaches to habitat restoration. After much research, the reserve completed a tidal linkage project, a 20-acre model marsh project and a hillside restoration of coastal sage scrub environment. Using the lessons learned from the model marsh project, a larger 500-acre restoration effort is being planned. Education programs at the reserve are bilingual and include K-12 programs, interpretive walks, beach clean-ups, coastal decisionmaker workshops, and teacher training courses for primary and secondary grades. Coastal decisionmaker workshops have focused on restoration and landscaping using native species, bioengineering solutions for erosion control, and restoration techniques for contractors.

In 2003, the reserve's Coastal Training Program has focused on forging new relationships with the Mexican portion of the watershed. On April 10, the reserve hosted the Mayor of Tecate and the City Manager of Tijuana at a meeting of its management authority. The reserve is currently negotiating Memoranda of Understanding with both municipalities to jointly sponsor watershed management projects in Mexico.

## ***San Francisco Bay National Estuarine Research Reserve***

*Proposed*

*Lead Agency: San Francisco State University*

All 4,305 acres of the proposed San Francisco Bay Reserve are presently in public ownership. Thirteen federally listed threatened and endangered species utilize the proposed reserve. The proposed components encompass 10 percent of the remaining historical wetlands in the San Francisco Bay and host 356,000 visitors annually. The reserve is scheduled for designation in 2003.

## **PARTNERSHIPS IN ACTION**

On May 17, 2003, citizen-monitoring groups joined forces to sample the water of California's coastal rivers, streams, and ocean in the state's first Coast-Wide Snapshot Day. With funding from state and federal agencies, the California Coastal Commission partners with citizen monitoring groups up and down the state to coordinate monitoring along the entire California coast. The event relies upon the participation of state and regional agencies, eight Coastal Coordinators, and numerous citizen-monitoring groups. The Coast-Wide Snapshot Day Committee provides coordination, technical materials, and training. The objective of the event is to educate Californians about water quality and to enhance communication among monitoring groups throughout the state. The Snapshot participants create the largest set of unified citizen monitoring data for California.